

## ABSTRACT

To produce high-performance specific gene amplification primers for detecting, quantifying, or identifying *Vibrio cholerae* and *Vibrio mimicus*, having low risk of misidentification and practically sufficient amplification efficiency and amplification specificity. We have determined partial nucleotide sequences of *rpoD* and *gyrB* genes of *Vibrio cholerae*, *Vibrio mimicus*, and closely related species, revealed their phylogenetic relationship, and then identified nucleotides characteristic of *Vibrio cholerae* and *Vibrio mimicus*, respectively. Thus, we have made it possible to design probes having high specificity and gene amplification primers having high specificity and excellent amplification efficiency, both of which contain the characteristic nucleotides.